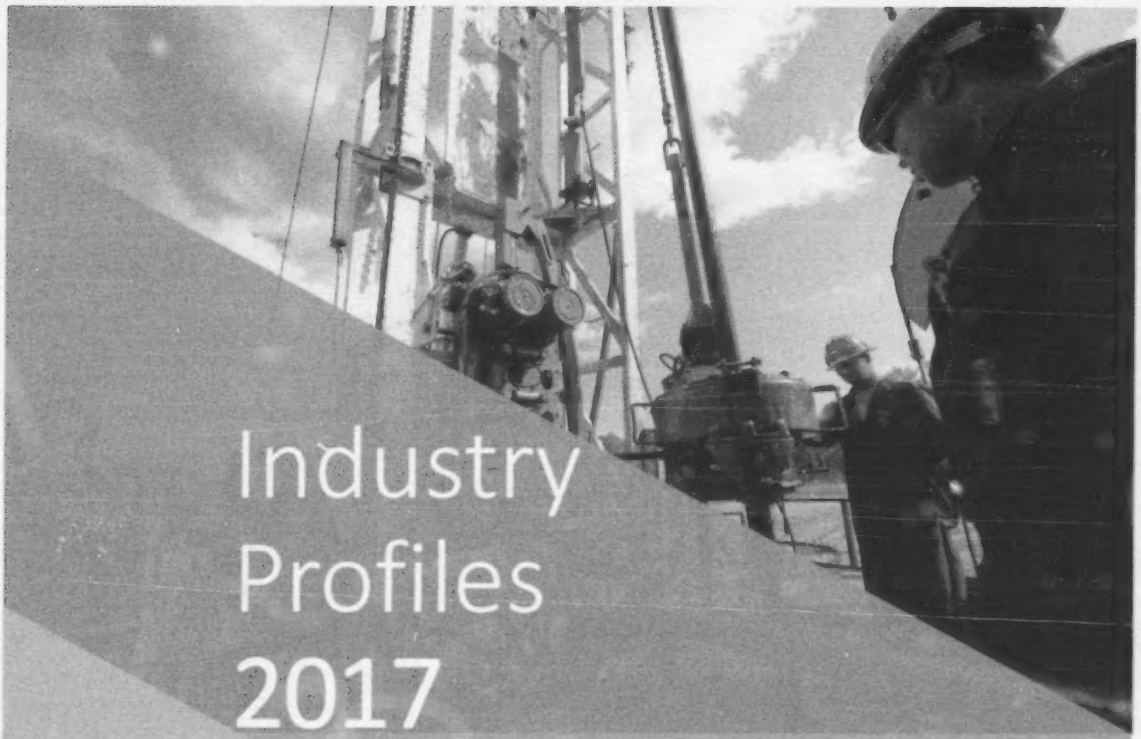

Industry Profiles 2017

Mining and Oil and Gas Extraction Industry

Alberta Government

OVERVIEW

The Mining and Oil and Gas Extraction industry[1] in Alberta includes companies involved in activities engaged in extracting naturally occurring minerals, such as:

- exploring for crude petroleum and natural gas;
- drilling, completing and equipping wells;
- operating separators, emulsion breakers, desilting equipment and field gathering lines for crude petroleum;
- mining for coal, metal ore, liquids, and non-metallic mineral mining and quarrying; and
- other activities in the preparation of oil and gas up to the point of shipment from the producing property.

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[1] North American Industry Classification System (NAICS) 2007 211, 212, 213

SECTION A
BUSINESS ENVIRONMENT

1. 2016 Employment and Unemployment Numbers and Rates

Table 1

	Alberta	Mining and Oil and Gas Extraction Industry
Employment	2,263,800	135,800
Employment Share	N/A	6.0%
Unemployment	200,800	15,000
Unemployment rate	8.1%	9.9%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0008, 2016
Note: Note: N/A denotes not-applicable. Employment share is obtained by dividing the number of employment in this industry by total employment in Alberta.

For more information on employment numbers or for a historical comparison, please go to the Labour Force Statistics[2] website or Statistics Canada[3].

2. Industry's Growth

- The Mining and Oil and Gas Extraction industry accounted for 6.0% of total employment in Alberta in 2016.
- Employment in this industry is expected to grow at an average rate of 1.1% from 2016 to 2019[4].
- The industry is expected to account for 7.2% of total employment in Alberta in 2017.

For more information, see the Alberta Learning Information Service (ALIS)[5] website for descriptions of industries.

[2] See http://work.alberta.ca/labour/labour-force-statistics-and-annual-reviews.html
[3] See http://www.statcan.gc.ca
[4] Alberta Modified Canadian Occupational Projection System (COPS) Outlook 2015 – 2019, Industry Employment Outlook
[5] See http://www.alis.alberta.ca

3. Facts, Trends and Outlook

According to Statistics Canada's National Economic Accounts, the Mining and Oil and Gas Extraction industry accounted for approximately 27.4% of Alberta's Gross Domestic Product in 2015, down from 29.6% in 2005. Its contribution to Alberta's total employment decreased from 6.7% in 2006 to 6.0% in 2016.

Total employment (the total number of employees and self-employed people, 15 years and over) in 2016 was 14.4% lower than its level in 2015. Over the last 10 years, employment fell by 5,100 from 2006, a 3.6% decrease. There were 135,800 employed in the industry in 2016, of whom 95.6% were full time and 4.4% were part time.

Table 2

Characteristic	Alberta	Forestry, Fishing, Mining and Oil and Gas Extraction*
Median Retirement Age (years)	63.3	62.3
Average Number of Hours Worked per Week	36.2	44.2
Multiple Jobholders (% of total employment)	5.9%	2.4%
Average Job Tenure (months)	90.2	83.2
Employees Under Union Coverage (%)	20.8%	10.2%
Employees Working Overtime per Week (%)	17.1%	26.7%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Tables 282-0022, 282-0031, 282-0042, 282-0078 and 282-0084, 2016, and custom tabulation (median retirement age)

* Mining and Oil and Gas Extraction is grouped with Forestry, Fishing, and Logging with Support Activities due to sample size.

Note: The percentage of multiple jobholders is obtained by dividing the number of multiple jobholders by total employment. This calculation method also applies to the percentage of employees under union coverage and the percentage of employees working overtime per week.

4. Size of Businesses in Alberta and the Industry

Table 3

Establishment Size	Businesses in Alberta		Businesses in Forestry, Fishing, Mining, Oil and Gas Extraction*	
	Number of Employees	%**	Number of Employees	%**
Less than 20 employees	673,000	35.6%	28,300	22.9%
20 to 99 employees	671,400	35.5%	32,800	26.5%
100 to 500 employees	346,900	18.3%	30,400	24.6%
More than 500 employees	199,800	11.0%	32,300	26.1%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0076, 2016

* Numbers and percentages refer to Fishing, Mining and Oil and Gas Extraction, and Forestry and Logging with Support Activities. These are grouped together for establishment size.

** Percentages may not add up to 100 due to rounding

Note: Statistics Canada's survey methodology for determining establishment size differs from the one it uses in the Labour Force Survey to determine total employment. As a result, the total number of employees by establishment size will not be the same as total employment in the industry, except by coincidence.

SECTION B
HUMAN RESOURCES PROFILE

1. Occupational Information

Some examples of occupations in the Mining and Oil and Gas Extraction industry include:

- mining engineer;
- blaster;
- drilling and service rig manager;
- petroleum engineer; and
- drilling rig leasehand/floorhand.

For a complete listing of all occupations related to this industry, as well as detailed information on education and skill requirements, visit the Alberta Occupational Profiles[6] website.

2. Demographics: Gender and Age

According to the Labour Force Survey, the gender breakdown in the Mining and Oil and Gas Extraction industry in 2016 was as follows:

- women employed: 33,500 people, or 24.7%
- men employed: 102,300 people, or 75.3%

Overall in Alberta, women accounted for 45.5% and men made up 54.5% of total employment (for all industries).

Table 4

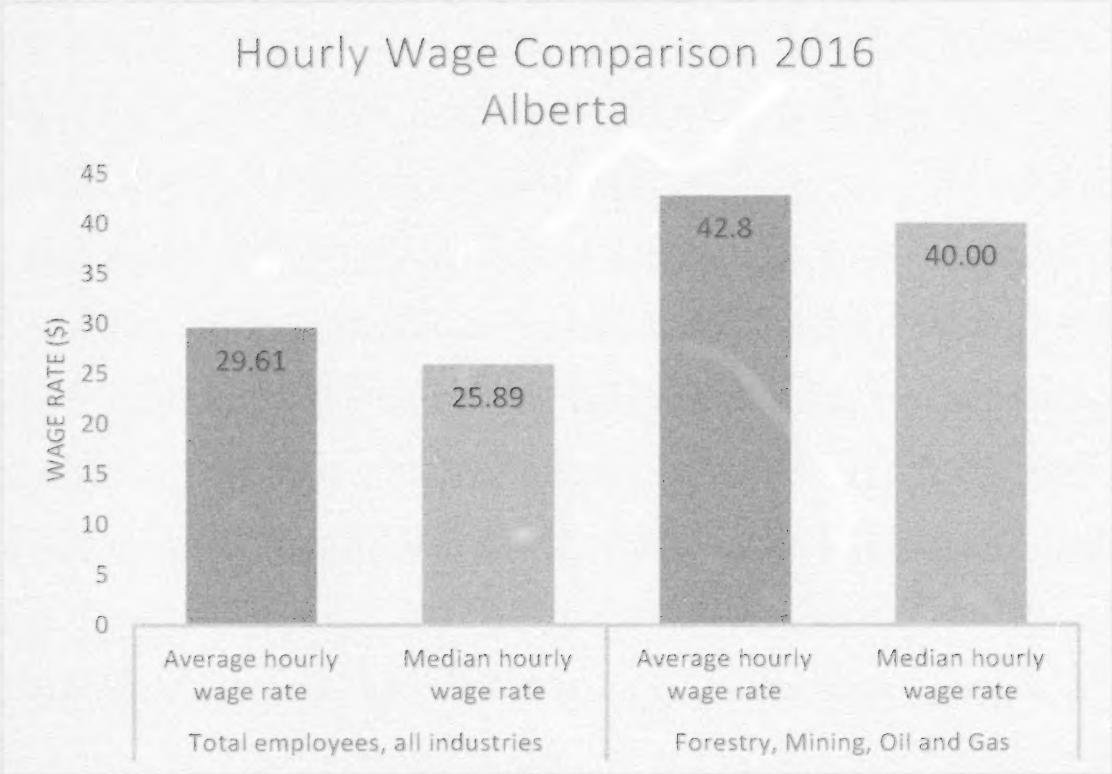
Age Characteristics	Employment in Alberta		Employment in Mining and Oil and Gas Extraction	
	Number	%*	Number	%*
15-24 years	303,200	13.4%	6,000	4.4%
25-54 years	1,536,000	67.9%	110,800	81.6%
55 years and over	424,600	18.8%	19,100	14.1%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0008, 2016
*Percentages may not add up 100 due to rounding.

[6] See http://occinfo.alis.alberta.ca/occinfopreview

3. Wages and Salaries

Chart 1



Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0072, 2016

Note: Wages pertain to Mining and Oil and Gas Extraction, Fishing, and Forestry and Logging with Support Activities, which are grouped together for sample size reasons.

Note: The average hourly wage is obtained by dividing the sum of the wages of all the employees by the total number of employees. The median hourly wage is that wage below which half the employees earn and above which half the employees earn.

Wage and Salary Information for Selected Occupations

Table 5

Occupation	Average Hourly Wage			Average Annual Salary
	Starting	Overall	Top	
Petroleum engineer	$49.92	$66.27	$92.33	$136,890
Petroleum, gas and chemical process operator	$38.20	$43.90	$49.04	$91,413
Truck driver (oil and gas extraction)	$26.68	$31.03	$36.27	$78,057

Data Source: 2015 Alberta Wage and Salary Survey

For more information on the *2015 Alberta Wage and Salary Survey*, refer to the WAGEinfo[7] website. For job descriptions, duties, skills and educational requirements of specific occupations in the Mining and Oil and Gas Extraction industry, visit the ALIS[8] website.

[7] See http://www.alis.alberta.ca/wageinfo
[8] See http://www.alis.alberta.ca

SECTION C
ADDITIONAL INFORMATION

Links to Industry Associations

- Canadian Association of Oilwell Drilling Contractors (http://www.caodc.ca)
- Canadian Association of Petroleum Producers (http://www.capp.ca)
- Canadian Institute of Mining, Metallurgy and Petroleum (http://www.cim.org)
- Coal Association of Canada (http://www.coal.ca)
- Petroleum Human Resources Council of Canada (http://www.petrohrsc.ca)
- Petroleum Services Association of Canada (http://www.psac.ca)
- Petroleum Technology Alliance Canada (http://www.ptac.org)

Call us or visit our website for more information or to find the following publications:

- 2016 Annual Alberta Labour Market Review
- Monthly Alberta Labour Force Statistics Highlights and Packages
- Alberta's Occupational Demand and Supply Outlook
- Alberta Labour Force Profiles
- Alberta Industry Profiles

www.work.alberta.ca/labour.html (see Labour Market Information)
In Edmonton: 780.422.4266
Long distance: 1.800.661.3753

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